



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/364,256 07/30/99 SINES

E 79.955

EXAMINER

MM12/0105

ASSOCIATE COUNSEL PATENTS  
CODE 3008 2  
NAVAL RESEARCH LABORATORY  
4555 OVERLOOK AVENUE SW  
WASHINGTON DC 20375-5325

PEREZ, G

ART UNIT

PAPER NUMBER

2834

DATE MAILED:

01/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	<b>Application No.</b> 09/364,256	<b>Applicant(s)</b> SINES, EDDIE	
	<b>Examiner</b> Guillermo Perez	<b>Art Unit</b> 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-16 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-16 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- |  |  |
|--|--|
| 14) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                     | 17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 15) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 16) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.    | 19) <input type="checkbox"/> Other: _____.                                   |

Art Unit: 2834

## **DETAILED ACTION**

### ***Priority***

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification (37 CFR 1.78).

### ***Claim Objections***

Claims 26 and 15 are objected to because of the following informalities: on claims 15 and 26, line 2 the word "ad" is misspelled. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 26 are rejected under 35 U.S.C. 112, -second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the outer casing" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2834

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Jarczynski (U.S. Pat. No. 5,091,666).

Jarczynski discloses a method for cooling an electrical device having layers of electrically conductive material wound on to a laminated core having a heat generating component comprising the steps of placing one or more thermally conductive strips in contact with the heat generating component, said thermally conductive strips receiving heat from the heat generating component; and removing heat from the thermally conductive strips (column 6, lines 21 to 34).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 to 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarczynski in view of Davis (U.S. Pat. No. 5,949,170).

Jarczynski discloses an electric motor comprised of one or more laminations of a metallic material forming an outer casing of the electric motor; one or more circular thermally conductive disks placed between pre-selected layers of the motor laminations,

Art Unit: 2834

said conductive disks conducting heat, generated by an electrical current flowing within the motor, to an edge of the conductive disk outside of the area covered by the motor laminations; an electrically conductive material wound in a plurality of layers within the laminations so as to form an electric field that drives an armature when an electrical current is applied; and means for conducting the heat at the end of the conductive disk; and one or more thermocoolers adjacent to and touching the outer casing of the motor to conduct heat from the metallic laminations forming the outer casing of the motor; and a method for cooling electrical devices having layers of electrically conductive material wound on a core comprised of the following steps: placing a thermally conductive strip having a first and second end between predetermined laminations of the core, said first and second ends of the thermally conductive material extending outside of the core (figure figure 2). However, Jarczynski does not disclose thermally conductive strips placed between preselected layers of the electrically conductive material, said thermally conductive strip extending outside of the area covered by the electrically conductive material, nor that the method of cooling comprises the step of placing a thermally conductive material, having a first and a second end, capable of conducting heat from between preselected layer of the electrically conductive material said first and second end of the thermally conductive material extending outside of the area covered by the electrically conducting material; and conducting the heat from the first and second ends of the thermally conductive material.

Art Unit: 2834

Davis discloses thermally conductive strips placed between preselected layers of the electrically conductive material, said thermally conductive strip extending outside of the area covered by the electrically conductive material, and that the method of cooling comprises the step of placing a thermally conductive material, having a first and a second end, capable of conducting heat from between preselected layer of the electrically conductive material said first and second end of the thermally conductive material extending outside of the area covered by the electrically conducting material; and conducting the heat from the first and second ends of the thermally conductive material (73 in figure 8) for the purpose of dissipating the heat created in the windings.

It would have been obvious at the time the invention was made to modify the electric motor of Jarczyński and provide it with thermally conductive strips placed between preselected layers of the electrically conductive material, said thermally conductive strip extending outside of the area covered by the electrically conductive material and providing the method with the step of placing a thermally conductive material, having a first and a second end, capable of conducting heat from between preselected layer of the electrically conductive material said first and second end of the thermally conductive material extending outside of the area covered by the electrically conducting material; and conducting the heat from the first and second ends of the thermally conductive material as disclosed by Davis for the purpose of cooling and thus improving useful life of the windings and thus of the electric motor.

Art Unit: 2834

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5841 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

GP  
December 28, 1999

*Thomas M. Ryzhkov*  
2800